

Exhibit C.5b - Idaho Nuclear Technology and Engineering Center Facilities - Disposition by 2012

DE-AC07-05ID14516
Modification 155

Idaho Nuclear Technology Engineering Center - EM							Radiological Contamination							
Building Number	Building Name	Area (sq ft)	# of Flrs	# Below Grade	Year Built	Facility Construction/Characteristics	Facility Usage/Capabilities	Ocp'd	Contaminated	Type	Level	Related Documents - Available on ICP Shared Library unless indicated as Technical Library (TL)	Comments	
CPP-601	Fuel Process Building	57981	5	3	1953	Reinforced Concrete Structure: One 1 ton crane, One 7.5 ton crane, three 15 ton cranes. Six Overhead Doors (12 ft wide, 14 ft high), One Steam Heater - 187,807 Btu/hr, Two Air Handling Units. Loading dock - 54.33 ft. wide.	Was the original processing facility at INTEC. There is a ramped access to the makeup level provided along the south side for delivery of process materials. The three levels below grade include the operating corridor, the service corridor and the access corridor. Contained within these lower levels are 24 cells used for various processing activities. The deep tanks, used for collection of contaminated liquids, is still operable and is located in the lower level of the facility.	No	Yes	Cs, Sr, U, Pu	> 1000D/M (Disintegrations/Min.)	IAG-37 for Fuel Processing Fac., LST-106 FPF Safety Basis List, INTEC Plant Safety Doc. (PSD), INEEL RCRA Part A Permit Application, SAR 147-2 Section 2.4.1.	Hazard Category 2 - INTEC Fuel Processing Facility, includes two facilities; CPP-601 (Fuel Processing Building) & CPP-602 (Denitrator Area) also part of the Hazard Category 2 - INTEC Process Equipment Waste System (PEW) which includes the following: CPP-601, CPP-604, CPP-641, CPP-642, CPP-1619 & CPP-1683. Though no longer needed for its intended mission, several active support systems remain operational including Liquid Waste Management (Deep Tanks), Airborne Waste Management, and bulk chemical transfer tanks. Process equipment/piping has been deactivated, left in place and still contains contamination. The Halon disconnected, halon remains in the bottles in the "X" cell. Samplers are no longer in service, highly contaminated with lead shielding (contains over 100 tons of lead). In the east corridor, there is a uranium monitor never used which still contains its source.	
CPP-601 (cont)													Cells "L, M, N, & O" contain Raschag Rings that are brittle from Rad contamination. Requires isolation of deep tanks, utilities rerouting and utility isolations for D&D. This facility is expected to be down graded to a Hazard Category 3 by the end of FY04.	
CPP-603A	Fuel Receiving and Storage Facility (Basins)	15860	2	1	1953	Reinforced concrete structure. This facility consists of 3 underwater fuel storage basins connected by a canal (contains 1.5 million gals of water). Sediment within the basins is estimated to be approximately 1,480 cu. ft. (54.4 tons) and contains: U-235 (140 ppm, average, for an estimated 6.4 +/- 1.0kg), Pu of 3.45 E-3Ci, & Cd< 1 ppm in sludge, TCLP). A decontamination pad is located near the basin, as is the Fuel Element Cutting Facility - a small "L"-shaped shielded hot cell for the cutting of fuel. The facility is supported by 2 cask loading/unloading areas, 2 truck loading/unloading bays. One cooling - DX, two 15 ton cranes, one 40 ton crane, one 1.5 ton crane, fire suppression system - wet pipe - 26,800 sq. ft., air compressor - rotary screw type, fuel transport car, and criticality alarm system.	Special Nuclear Materials Storage: Building CPP-603, known as the Wet & Dry Fuel Storage Facility, is essentially two buildings under one roof and provides fuel management capability for two major functions - wet and dry storage of spent nuclear fuel (SNF). The wet side of CPP-603 (listed as CPP-603A) is described in this table, the Dry Side (CPP-603B) is described in the operational facility list (see exhibit C.2.1b).	Yes	Yes	Limited loose contamination, mixed fissile products, fissile material.	About 107 Ci mixed fission prod. (SNF).	IAG-44 for INTEC Underwater fuel receiving & storage facility (part of CPP-603). IAG-40 for INTEC irradiated fuel storage facility, SAR 147-2 Section 2.1.1, PSD 4.12 series & PSD 4.6, Plant Safety Document - CPP-603 Underwater Fuel Receiving, Handling, and Storage, Document Category 1, WIN-107-4.6, Rev 3, 10/97. The following documents provide information on CPP-603A deactivation: 1) BBWL Internal Report, Deactivation Plan for the CPP-603 Fuel Storage Facility, INEEL/INT-01-00017, Rev 0, February 2001, 2) EDF-676, Engineering Design File - CPP-603 Basin Deactivation, Feasibility Study Report, Rev 0, Project File No.: 020845-09/26/96 - SAR/TSR-116 (TL).	Hazard Category 2 - INTEC CPP-603 Basin Facility includes CPP-603A (Fuel Receiving and Storage Facility), CPP-648 (Basin Sludge Tank Control House & Vault), & CPP-764 (SFE Waste Hold Tank Vault). In accordance with the Court Order of 12/22/93, the basins were emptied of all SNF on May 18, 2000. This portion of CPP-603 is undergoing preparatory activities for D&D. As part of the deactivation, the overflow pit is to be drained, sludge removed, lines capped and filled to ensure complete isolation of the wet basin. This activity is to be completed by end of FY04. The CPP-603 facility is currently under RCRA closure and basin sludge has been determined to be hazardous. There are options to transfer the facility closure and D&D under CERCLA, if deemed cost effective and appropriate. The final D&D activities for the entire CPP-603 facility will not be initiated until completion of the dry side mission.	
CPP-603A (cont)													Dispositioning the CPP-603A basins requires safety document revisions, utilities isolation, rerouting of utilities and significant upfront planning to preclude mission disruptions to the CPP-603B (dry side). The characterization analysis of the basin side indicates that there are no surprises and the area is below MCL limits.	
CPP-640	Headend Process Plant	13000	5	3	1961	Reinforced Concrete Structure: Includes three Cooling - DX Air conditioners, two 1 ton cranes, two 3 ton cranes, two 1/2 ton cranes, three 1/4 ton cranes, one 30 ton crane, one 1.5 ton crane, one overhead door - 14 ft. wide by 22 ft. high, fire suppression system - wet pipe - 13,000 sq. ft., one steam heat air handling unit.	Nuclear Chemical Process Facility: Originally used for headend processing. Currently awaiting D&D.	No	Yes	Cs, Sr, U, Pu	> 1000D/M	HAD-182	Less than Haz. Cat 3. At 1/31/05, CPP-640 will be deactivated, i.e., process and subprocess systems have been flushed, isolated, and blanked. Hazardous material will have been removed, i.e., glycol, oils, asbestos, high radiation and facility is ready for active demolition. Characterization will be complete including sub level floors.	
CPP-648	Sludge Tank Control House	620	1	0	1973	Prefabricated/modular Structure: Includes two Electric Heaters - 5 KW, one steam unit heater. Storage vessel - 25000 gal., storage basin - 53 ft. long by 21 ft. wide by 9.16 ft. deep.	Service Building: Facility houses the sludge tank control functions associated with CPP-603.	No	Yes	Cs, Sr, U, Pu	> 1000D/M	IAG-44 for INTEC Underwater fuel receiving & storage facility (part of CPP-603 operations) - SAR/TSR-116 (TL)	Less than Haz. Cat. 3	